

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-282-5  
Relating to Certification of New Modifier Certified Motor Vehicles

K & E INTERNATIONAL AUTO CONSULTANTS

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That K & E International Auto Consultants emission control systems are certified in California as described below for gasoline-powered pasenger cars which are designated as 1986 model-year vehicles by the regulations:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
GK13.0V6FC52	183 (3.0)	Warm-Up Three-Way Catalyst Three-Way Catalyst Heated Oxygen Sensor (Mechanical Port Fuel Injection)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per mile</u>
0.41	7.0	0.7

The following are the certification emission values for this engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.35	4.9	0.2

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the Executive Officer has been provided evidence of service facilities in each of the seven major urban areas in California;

BE IT FURTHER RESOLVED: That the Executive Officer has been provided evidence of a one thousand dollar (\$1,000.00) recall time deposit account payable to the Air Pollution Control Fund or a prepaid insurance policy for the duration of the recall period for each vehicle produced which will provide for the execution of an ordered recall pursuant to Title 13, California Administrative Code Sections 2111, 2112 and 2113.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the prepaid warranty insurance policy to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2035 et seq. and Health and Safety Code Section 43204).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair and the Department of Motor Vehicles will be notified by copy of this order and attachment.

Executed at El Monte, California this 21<sup>st</sup> day of September, 1987.

  
K. D. Drachand, Chief  
Mobile Source Division

AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer K & E INTERNATIONAL Executive Order No. A-282-5  
 Engine Family GK13.0V6FC52/86 Evaporative Family GK1V6/86  
 Engine CID (Liters) 183 (3.0)

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 EEG-Electronic Engine Control  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor  
 VV-Variable Venturi

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Vaive  
 CL-Closed Loop  
 EGR-Exhaust Gas Recirculation  
 EM-Engine Modification  
 OC-Oxidation Catalyst System  
 TR-Thermal Reactor  
 TWC-Three-Way Catalyst System

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection  
 DID-Diesel Injection Direct  
 DIP-Diesel Injection Prechamber  
 EFI-Electronic Fuel Injection  
 MFI-Mechanical Fuel Injection  
 TC-Turbocharge

VEHICLE MODELS: 300 E, 300SE, 300TE, 300SL

DRIVE SYSTEM: Front Engine Rear -Wheel Drive

E.O. #A - 282-5

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars     Light-Duty Trucks     Medium-Duty Vehicles     Gas     Diesel

Manufacturer K & E INTERNATIONAL Page 2

Engine Family GK13.0V6FC52/86 Engine Code M103

ECS (Special Features) CL, TWC (MEI) CID (Liter) 183 (3.0) L-6  
Type 183 (3.0) L-6

Engine Code	Vehicle Models (If Coded see attachment)	Trans	Equiv. Test Wt. Lbs.	Ign. System VA Part No.	Fuel System MFI Part No.	EGR Valve Part No.	Label Ident. Part No.
M103	300 E 300 TE	A4, M5	3625	103 158 000	Fuel Distributor 0 438 101012 Air Sensor: 0 258 003025	DNA	Tune-up 124584472L Vac. Line Diagr.: 124584452L
M103	300SE	A4 M5	3875	103 158 000	Fuel Distributor 0 438 10112 Air Sensor: 0 258 003025	DNA	Tune-up 126584472L Vac. Line Diagr.: 126584452L
M103	300 SL	A4, M5	3626	103 158 000	Fuel Distributor 0 438 101012 Air Sensor: 0 258 003025	DNA	Tune-up 107584472L Vac. Line Diagr.: 107584452L

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two weights are listed, the lower weight will be used for testing.

\*Add 10% to dyno test HP for air conditioning usage.

Date of Issue —

19 86 MODEL-YEAR CERTIFICATION REVIEW SHEET  
EXHAUST/EVAPORATIVE SYSTEM & FILL PIPE SPECIFICATION COMPLIANCE

E.O. # A-282-5

Mfr. K & E INTERNATIONAL INC. Engine Family GK13 OV6EC52  
 PC  LDT  MDV  Gas  Diesel  LPG  Cert. Type - CA 49S 50S   
 CID 183 Liters 3.0 Rated HP 132 KW 177 @ 5700 RPM - Rated Torque 225Nm @ 4400 RPM  
 Type Cert - 50K  100K  Evaporative Family GK13.OVE Eng. Type L-6  
 Exhaust Control Sys. and (Special Features) CL, TWC (MFI)

	Section/Page		Section/Page
1 Authorized Representative	Sect. 1:1,2	9 Exhaust Control System	Sect. 8:25-49
2 Fuel, Test Equipment Procedures & Route	Sect. 3,4,5:1	10 Projected Sales	Sect. 17:15
3 Warr. State & Parts List	Sect. 17:4-7,10	11 Vehicle Descript.	Sect. 10:24-26
4 Maint: Cert/Req'd/Recm'd	Sect. 6:1,2,5,6	12 Test Veh. Information	Dur. Emis.
5 Tune-Up Lab./Vac. Hose Diag.	Sect. 7:3	C/O MY or C/A EF	New 86 New 86
6 Evap. Control System	Sect. 8:83-92, Sec. 9:1-4	Zero Mile Books	
7 Engine Parameters	Sect. 10:1-17	Vehicle Logs	Sect. 12:1-4
8 Fuel/Ignition Systems	Sect. 8:1-24,50,51	Maint. Logs & Engr. Eval.	
		13 Evap. Bench Test Procedure	Sect. 17:32-42

STATEMENTS:

- |   |             |                                 |                  |
|---|-------------|---------------------------------|------------------|
| 1 Gen. Std., Increase in Em., Safety, Mtg. All Req'ments. | Sect. 16:2  | 1 Fill Pipe Specs.              | Sect. 17:48-52   |
| 2 Prod. Veh. Same as Test Veh.                            | Sect. 17:43 | 2 Altitude A/F Req'ment         | Sect. 8:28       |
| 3 Label Durability  | Sect. 17:45 | 3 Carb. Tamperproof Req'ment    | DNA(MFI)         |
| 4 Driveability  | Sect. 17:46 | 4 Ck for DF, Outlier, Line Xing | Sect. 12:5.,6    |
| 5 Fill Pipe Access Zone                                   | Sect. 17:47 | 5 EPA Certificate               | Inc. in Sect. 17 |
| 6 Fill Pipe Performance                                   | Sect. 17:47 | 6 Two yr./24K Warranty          | DNA              |
|   |             | 7 Alcohol Compatible            | Owners Manual    |
|   |             | 8 Cert. Preview Program         | MY 87            |

PROJECTED EMISSIONS (1) (2)

Veh. ID	Code (Displ)	Trans	Axle Ratio	ETW	RLHP	MPG City/Hwy	Test Loc.	HC	CO	NOx	Hwy 50K NOx	50K Evap	50K Part
W107	3.0 Ltr.	A4	3.46	3750	7.5	0:20	CARB	0:35	4.9	0:2			

(1) The emission data vehicle/s above comply with standards of 0.41 7.0 0.7 0.93 2.0  
 and includes deterioration factors of 1.2 12 1.1 1.1 0.05

Evaporative DF is the average of Vehicle DF Assigned and Bench DF Assigned

(2) Trap Oxidizer: Yes  No  Continual  Periodic   
 Remarks Carryback of 1987 data to 1986 MY vehicles. ECS identical

Application 1.e. some spec. & part nos. (GK13.OV6FCS8)  
 Processed by J. Ward Date 9/1/87 Reviewed by R. J. Kenny Date 9/2/87